

CLAIM AMENDMENTS

Please amend Claim 1 and cancel Claim 6 as follows:

1. (Currently Amended) A sensor integrated on a single semiconductor substrate, comprising:

a sensor block including a pixel unit and a scanning unit for selecting a pixel of the pixel unit, the pixel unit comprising a plurality of pixels each including a light-receiving element, a floating diffusion region, a transfer MOS transistor for transferring an electric carrier in the light-receiving element to the floating diffusion region, an amplifying MOS transistor having a gate connected to the floating diffusion region, and a reset MOS transistor for resetting the electric carrier in the floating diffusion region;

a signal processing block for processing a signal output from said sensor block;

a single electric power voltage input terminal for externally inputting an electric power voltage from outside of the substrate; ~~and~~

~~a voltage supply unit for supplying a first voltage to the sensor block;~~ a first level shift means disposed on the substrate for level shifting a voltage supplied from the single electric power voltage input terminal to generate a first voltage, and for supplying the first voltage to a gate of the reset MOS transistor, wherein the first voltage is larger than a voltage supplied to a drain of the amplifying MOS transistor of the pixel; and

a second level shift means disposed on the substrate for level shifting a voltage supplied from the single electric power voltage input terminal to generate a second voltage, and for supplying a second voltage to the signal processing block, wherein

the second voltage is smaller in amplitude than the first voltage, ~~and wherein the voltage supply unit is supplied with electric power from a single power source disposed externally of the semiconductor substrate.~~

2. (Original) A sensor according to Claim 1, wherein a gate insulating layer of at least some insulated gate transistors of said sensor block is thicker than that of an insulated gate transistor used in said signal processing block.

3. (Original) A sensor according to Claim 1, wherein a well density of at least some insulated gate transistors of said sensor block is lower than that of an insulated gate transistor used in said signal processing block.

4. (Original) A sensor according to Claim 1, wherein a threshold voltage of at least some insulated gate transistors of said sensor block is higher than that of an insulated gate transistor used in said signal processing block.

5. (Previously Presented) A sensor according to Claim 1, wherein the light-receiving element is a buried photodiode.

6. (Cancelled)

7. (Previously Presented) A sensor according to Claim 1, wherein said sensor block and said signal processing block are connected via a level shift circuit for shifting a signal level.

8. (Original) A sensor according to Claim 1, wherein said signal processing block comprises an A/D conversion circuit for converting an analog signal into a digital signal.

9. (Previously Presented) A sensor according to Claim 8, wherein said signal processing block comprises a signal processing circuit for forming a luminance signal and a chrominance signal.

10.-20. (Cancelled)